

# SLOVENSKI STANDARD SIST EN 572-4:2004

01-september-2004

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Glass in building - Basic soda lime silicate glass products - Part 4: Drawn sheet glass

Glas im Bauwesen - Basiserzeugnisse aus Kalk-Natronsilicatglas Teil 4: Gezogenes Flachglas ITeh STANDARD PREVIEW

(standards.iteh.ai)

Verre dans la construction - Produits de base: verre de silicate sodo-calcique - Partie 4: Verre étiré SIST EN 572-4:2004

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Ta slovenski standard je istoveten z: EN 572-4:2004

ICS:

81.040.20 Steklo v gradbeništvu Glass in building

SIST EN 572-4:2004 en

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EUROPEAN STANDARD NORME EUROPÉENNE

EN 572-4

EUROPÄISCHE NORM

June 2004

ICS 81.040.20

Supersedes EN 572-4:1994

#### **English version**

# Glass in building - Basic soda lime silicate glass products - Part 4: Drawn sheet glass

Verre dans la construction - Produits de base: verre de silicate sodo-calcique - Partie 4: Verre étiré

Glas im Bauwesen - Basiserzeugnisse aus Kalk-Natronsilicatglas Teil 4: Gezogenes Flachglas

This European Standard was approved by CEN on 1 April 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

#### SIST EN 572-4:2004

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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# EN 572-4:2004 (E)

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#### **Foreword**

This document (EN 572-4:2004) has been prepared by Technical Committee CEN/TC 129 "Glass in building", the secretariat of which is held by IBN.

This document supersedes EN 572-4:1994.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This European Standard "Glass in building – Basic soda lime silicate glass products" consists of the following parts:

EN 572-1	Definitions and general physical and mechanical properties				
EN 572-2	Float glass				
EN 572-3	Polished wired glass TANDARD PREVIEW				
EN 572-4	Drawn sheet glass (standards.iteh.ai)				
EN 572-5	Patterned glass <u>SIST EN 572-4:2004</u>				
EN 572-6	Wired patterned glass https://standards.iteh.ai/catalog/standards/sist/8296763c-7f0f-43a9-bc93-fabd5b517682/sist-en-572-4-2004				
EN 572-7	Wired or unwired channel shaped glass				
EN 572-8	Supplied and final cut sizes				
EN 572-9	Evaluation of conformity/Product standard				

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EN 572-4:2004 (E)

#### Scope

This Part of this European Standard specifies dimensional and minimum quality requirements (in respect of optical and visual faults) for drawn sheet glass, as defined in EN 572-1, for use in building.

This Part of this standard applies only to drawn sheet glass supplied in rectangular panes and in stock sizes.

EN 572-8 gives information on drawn sheet glass in sizes other than those covered by this Part.

#### Normative references 2

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 572-1:2004, Glass in building — Basic soda lime silicate glass products — Part 1: Definitions and general physical and mechanical properties.

## Teh STANDARD PREVIEW

#### 3 Terms and definitions

# (standards.iteh.ai)

For the purposes of this European Standard, the terms and definitions given in EN 572-1:2004 and the following apply. SIST EN 572-4:2004

#### 3.1

https://standards.iteh.ai/catalog/standards/sist/8296763c-7f0f-43a9-bc93fabd5b517682/sist-en-572-4-2004 new antique drawn sheet glass

glass produced by the drawn sheet process that has specific surface phenomena intentionally incorporated during the drawing process

#### 3.2

#### drawn sheet glass for renovation

drawn sheet glass that has been allowed to develop defects, e.g. gaseous, solid inclusions and linear/extended faults, that are representative of historic drawn sheet production

#### 3.3

#### drawn sheet glass

flat, transparent, clear or tinted soda-lime silicate glass obtained by continuous drawing, initially vertically, of a regular thickness and with the two surfaces fire polished containing a minimum number of visual faults

#### 3.4

#### length, H, and width, B

defined with reference to the direction of draw of the glass ribbon as shown in Figure 1

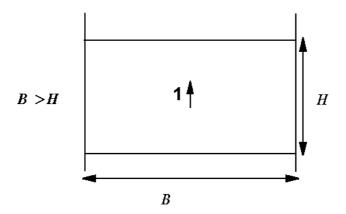


Figure 1 — Relationship between length, width and direction of draw

#### Key

1 direction of draw

#### 3.5

#### stock sizes

glass delivered in the sizes given in Table 1: ANDARD PREVIEW

(Sta Table 1 - Stock sizesai)

Nominal length SIST EN 572-4:2004		Nominal width	
https://standards.iteh.ai/ca	talog/standards/sis/8296763c-7f0f-43a9	<u>-bc93-</u> <b>B</b> (mm)	
New antique drawn sheet glass fabd5	517682/sist1e2007to-2-1604	1 450 to 2 160	
Drawn sheet glass for renovation	1 200 to 2 160	1 450 to 2 160	
Drawn sheet glass	1 600 to 2 160	2 440 to 2 880	

#### 3.6

#### optical faults

faults, which lead to distortions in the appearance of objects observed through the glass

#### 3.7

#### visual faults

faults, which alter the visual quality of the glass. They include spot faults and linear/extended faults

#### 3.8

#### spot faults

gaseous inclusions or other spot faults, e.g. solid inclusions, marks or deposits of small size

#### 3.9

#### gaseous inclusions

faults, which consist generally of an elongated bubble of gas

#### 3.10

#### linear/extended faults

faults, which can be on or in the glass, in the form of deposits, marks or scratches that occupy an extended length or area

#### 3.11

#### concentration, c

sum of the lengths of gaseous inclusions > 1,0 mm in any circle of 400 mm diameter

#### EN 572-4:2004 (E)

#### 4 Dimensional requirements

#### 4.1 Thickness

#### 4.1.1 General

The actual thickness shall be the average of four measurements, taken to the nearest 0,01 mm, one taken at the centre of each side. Measurement shall be by means of an instrument of the calliper micrometer type.

#### 4.1.2 Tolerances

The actual thickness rounded to the nearest 0,1 mm shall not vary from the nominal thickness by more than the tolerances shown in Table 2.

Table 2 — Allowable tolerances on nominal thickness

Nominal thickness	Tolerances		
(mm)	(mm)		
	New antique drawn sheet	Drawn sheet glass for renovation	Drawn sheet glass
2	(standar	ds.itel <del>i</del> %i)	± 0,2
2,8	± 0,3		
3		<u>572-4:2004</u> ± 0,3	± 0,2
4 http	s://standards.iteh.ai/catalog/stan ± 0,3 fabd5b517682/s	dards/sist/8296763c-7f0f-43a9- ist-en-572-4-2004	bc93- ± 0,2
5	Mode of 1700E/S	± 0,3	± 0,3
6	± 0,3	± 0,3	± 0,3
8		± 0,4	± 0,4
10			± 0,5
12			± 0,6

### 4.2 Length, width and squareness

#### 4.2.1 General

The nominal dimensions for length, H, and width, B, being given, the pane shall not be larger than a prescribed rectangle resulting from the nominal dimensions increased by the permissible plus tolerance or smaller than a prescribed rectangle reduced by the permissible minus tolerance.

The sides of the prescribed rectangles shall be parallel to one another and these rectangles shall have a common centre (see Figure 2).

The limits of squareness shall also be prescribed by these rectangles.

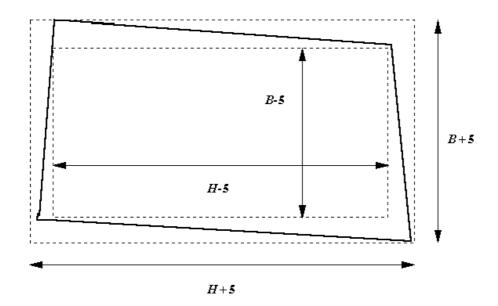


Figure 2 — Determination of length, width and squareness

#### 4.2.2 Tolerances

# iTeh STANDARD PREVIEW

The tolerances on the nominal dimensions are 16 mm.ds.iteh.ai)

#### SIST EN 572-4:2004

# **5 Quality requirements** standards.iteh.ai/catalog/standards/sist/8296763c-7f0f-43a9-bc93-fabd5b517682/sist-en-572-4-2004

#### 5.1 General

Drawn sheet glass (3.3) is classified according to both optical and visual faults.

New antique sheet glass (3.1) and sheet glass for renovation (3.2) are classified according to their levels of visual faults.

#### 5.2 Methods of observation and measurement

#### 5.2.1 Optical faults of drawn sheet glass (3.3)

A reticulated screen is observed through the pane of glass to be examined.

The screen should have approximately the same dimensions as the pane of glass to be examined. It should consist of a matt black background (reflection coefficient between 0,2 and 0,4) having a network of lines 10 mm thick of a colour contrasting clearly with the background. The network of lines should have the appearance of a wall of bricks whose size is  $200 \text{ mm} \times 70 \text{ mm}$ , each line offset by 100 mm from the lines above and below.

The lighting of the screen should correspond to diffuse natural or artificial daylight.

Place the pane of glass to be examined vertically 3 m from the screen. Arrange the point of observation 1 m from the glass keeping the direction of observation perpendicular to the screen. Arrange the pane of glass to form an angle of 45° with the plane of the screen.

Place the pane of glass to be examined vertically 3 m from the screen. Arrange the point of observation 1 m from the glass keeping the direction of observation perpendicular to the screen. Arrange the pane of glass to form an angle of 45° with the plane of the screen.